

1/14

FIG. 1

REPRESENTATIVE ORGANOSILANES

R = functional group of chemical interest
 A = non-reactive group
 X = hydrolyzable group

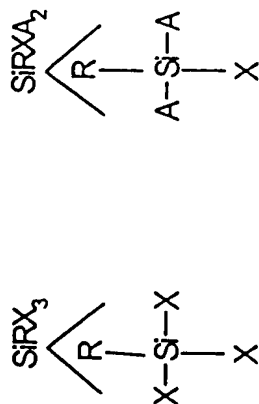
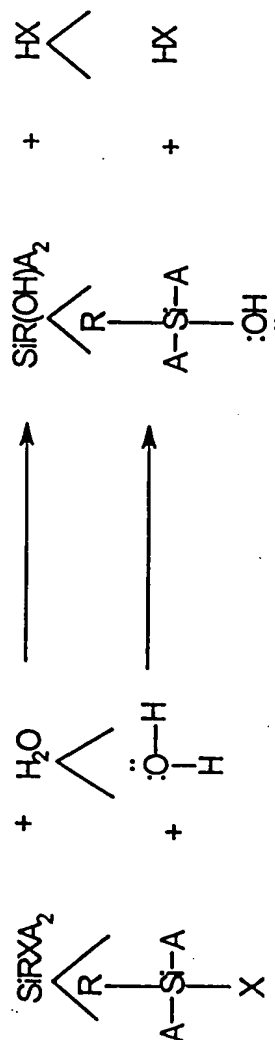
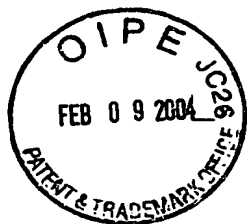


FIG. 2

HYDROLYSIS OF AN ORGANOSILANE TO PRODUCE AN ORGANOSILANOL





2/14

FIG. 3
SILANOL CONDENSATION REACTION

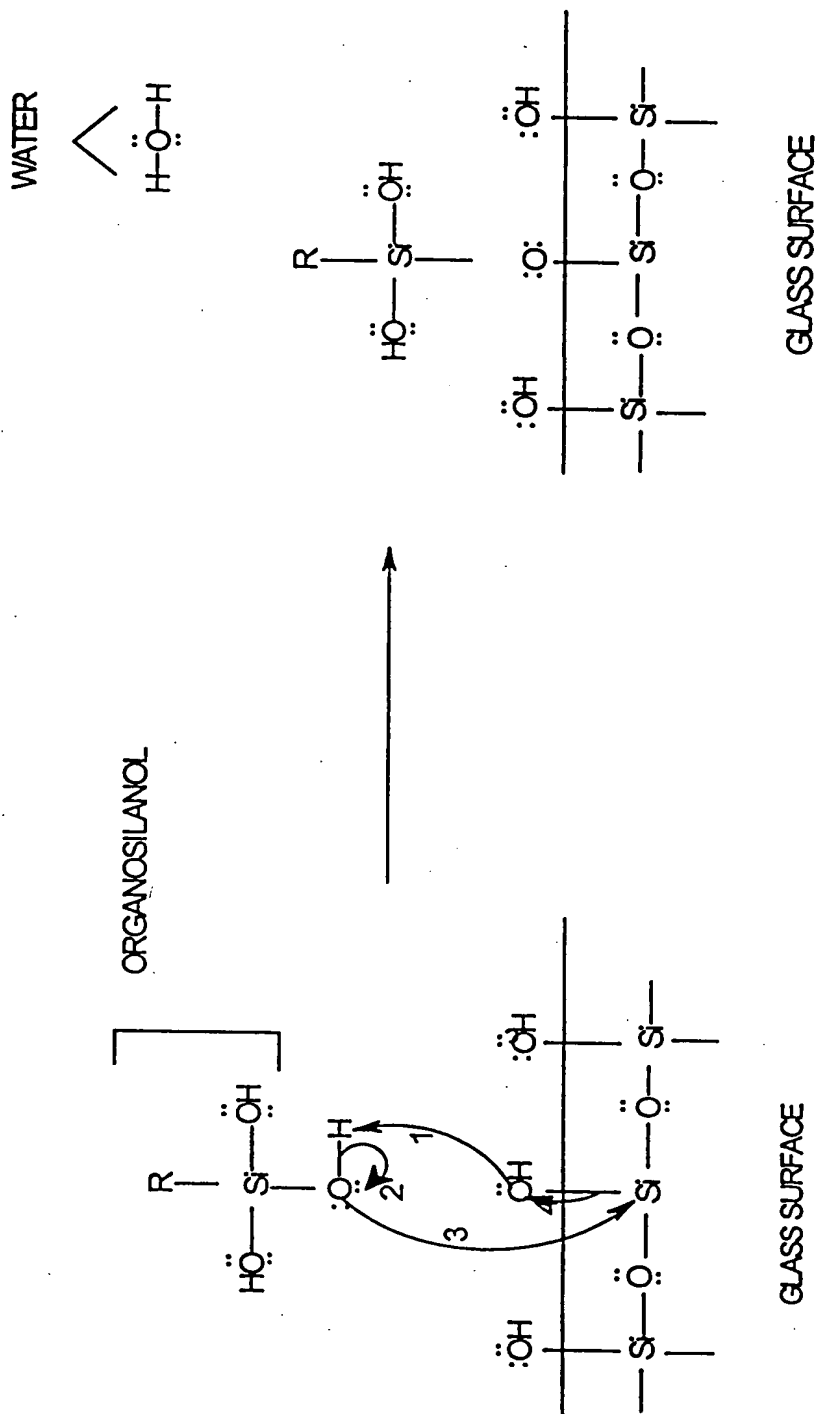
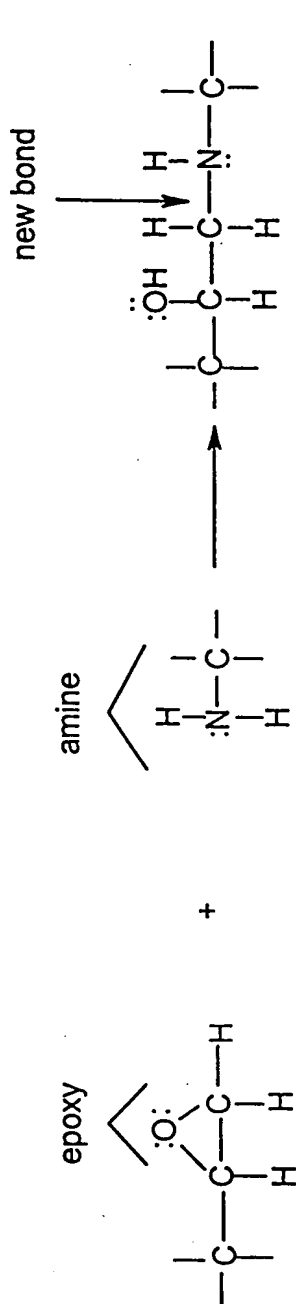


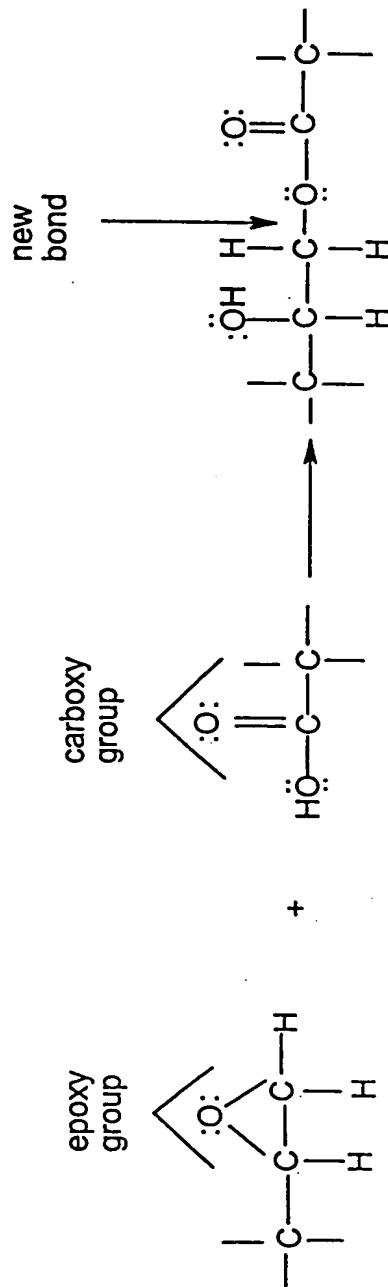


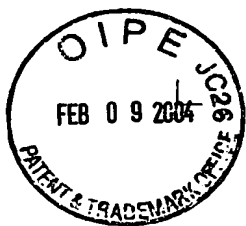
FIG. 4
REACTIONS OF EPOXY GROUPS

A: With an amine group



B: With a carboxyl group

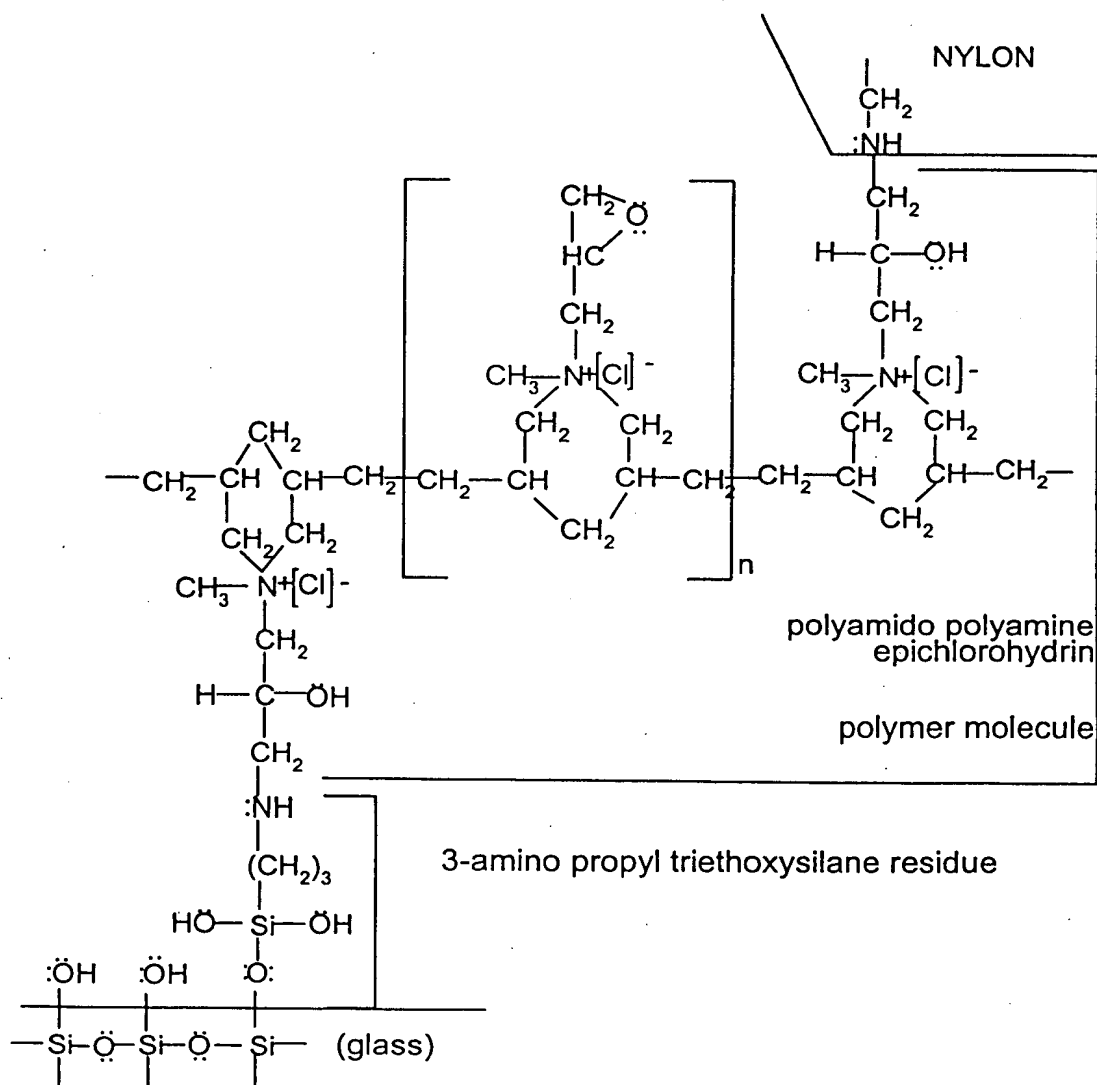




4/14

FIG. 5A

Bond using 3-Amino propyl triethoxysilane and
polyamido polyamine epichlorohydrin polymer.



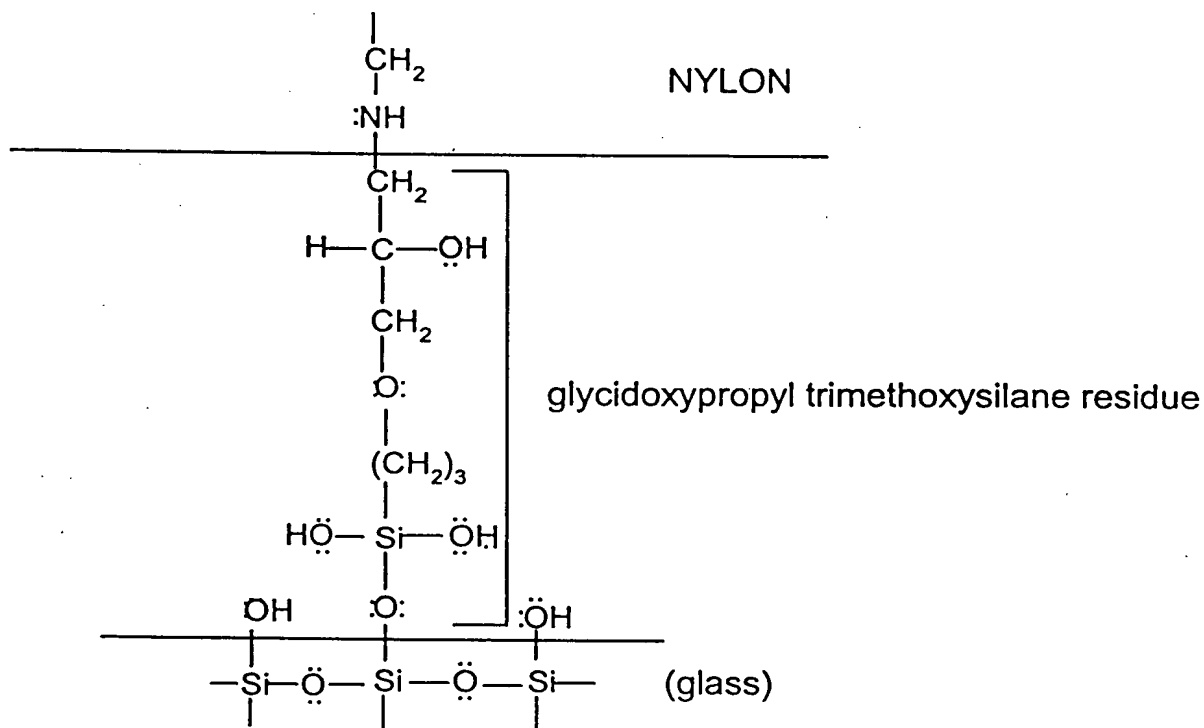


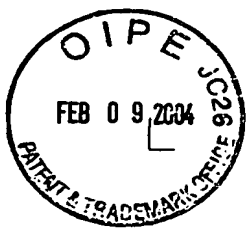
US Patent Appl.: 09/899,607
Inventor: Ander li et al
Title: LOW FLUORESCENCE NYLON/GAS
COMPOSITES FOR MICRO-ANALYTICAL
DIAGNOSTICS APPLICATIONS
Atty. ref.: CUNO-405

6/14

FIG. 5C

Bond using glycidoxypopyl trimethoxysilane





7/14

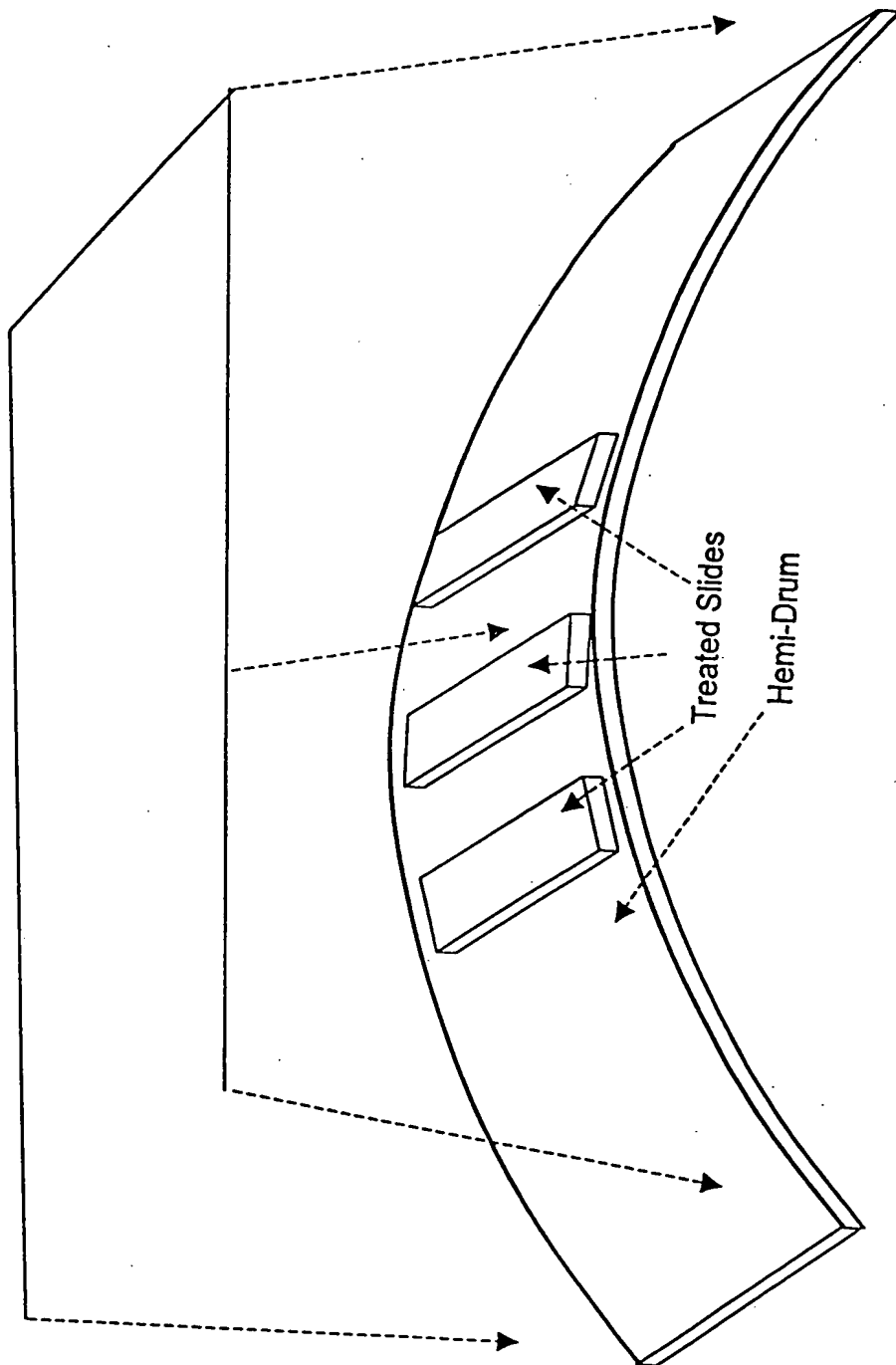
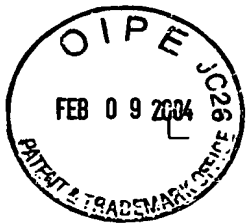


FIG. 6



8/14

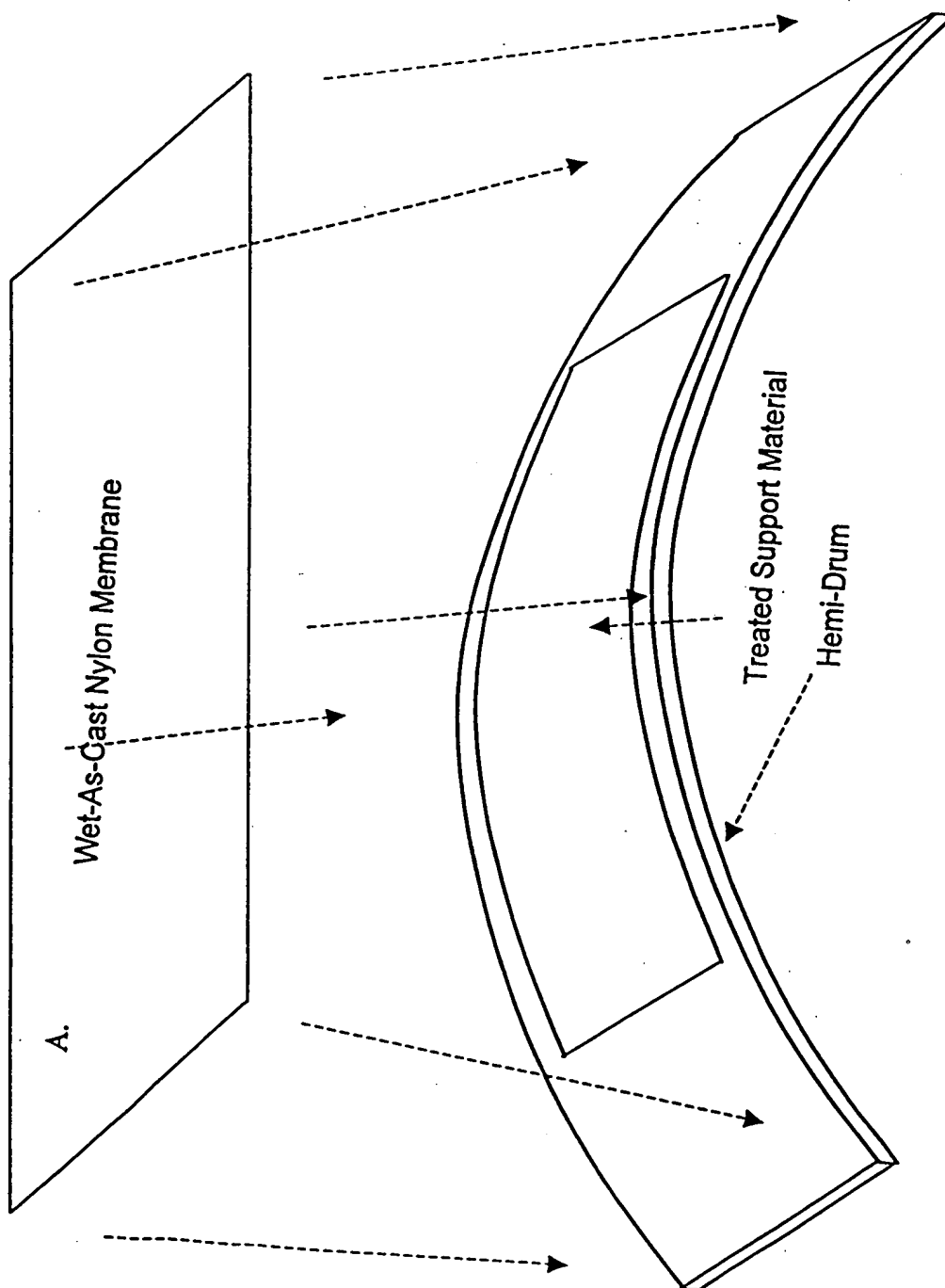
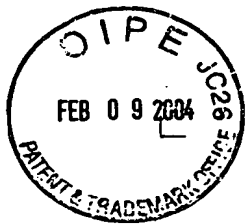


FIG. 7



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9/14

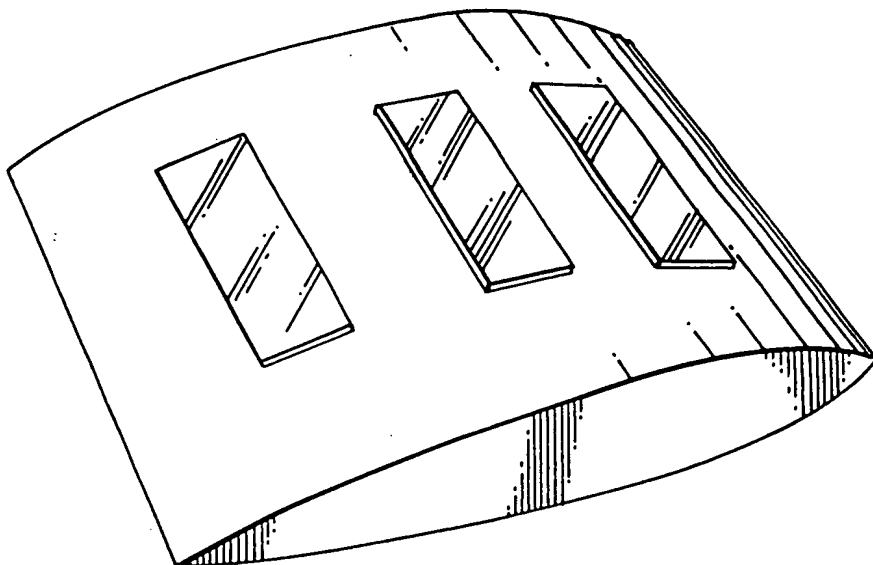


FIG. 6A

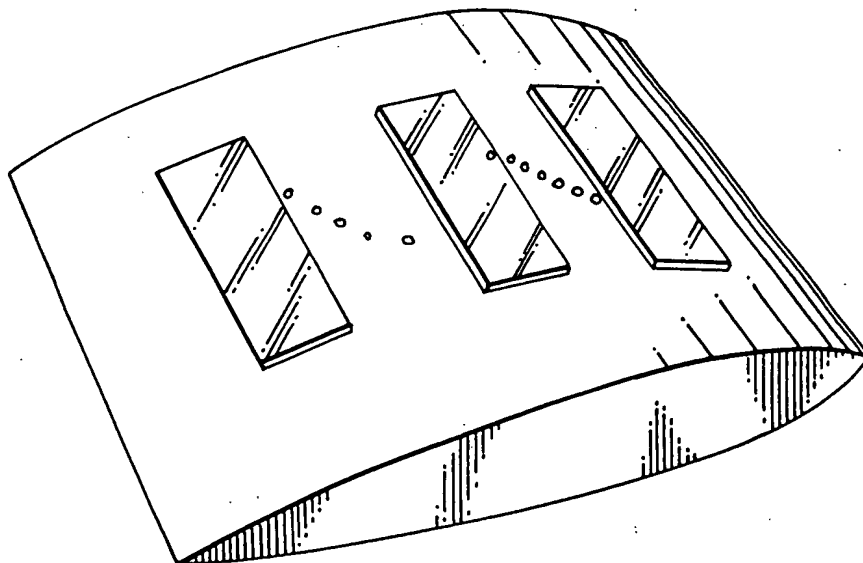


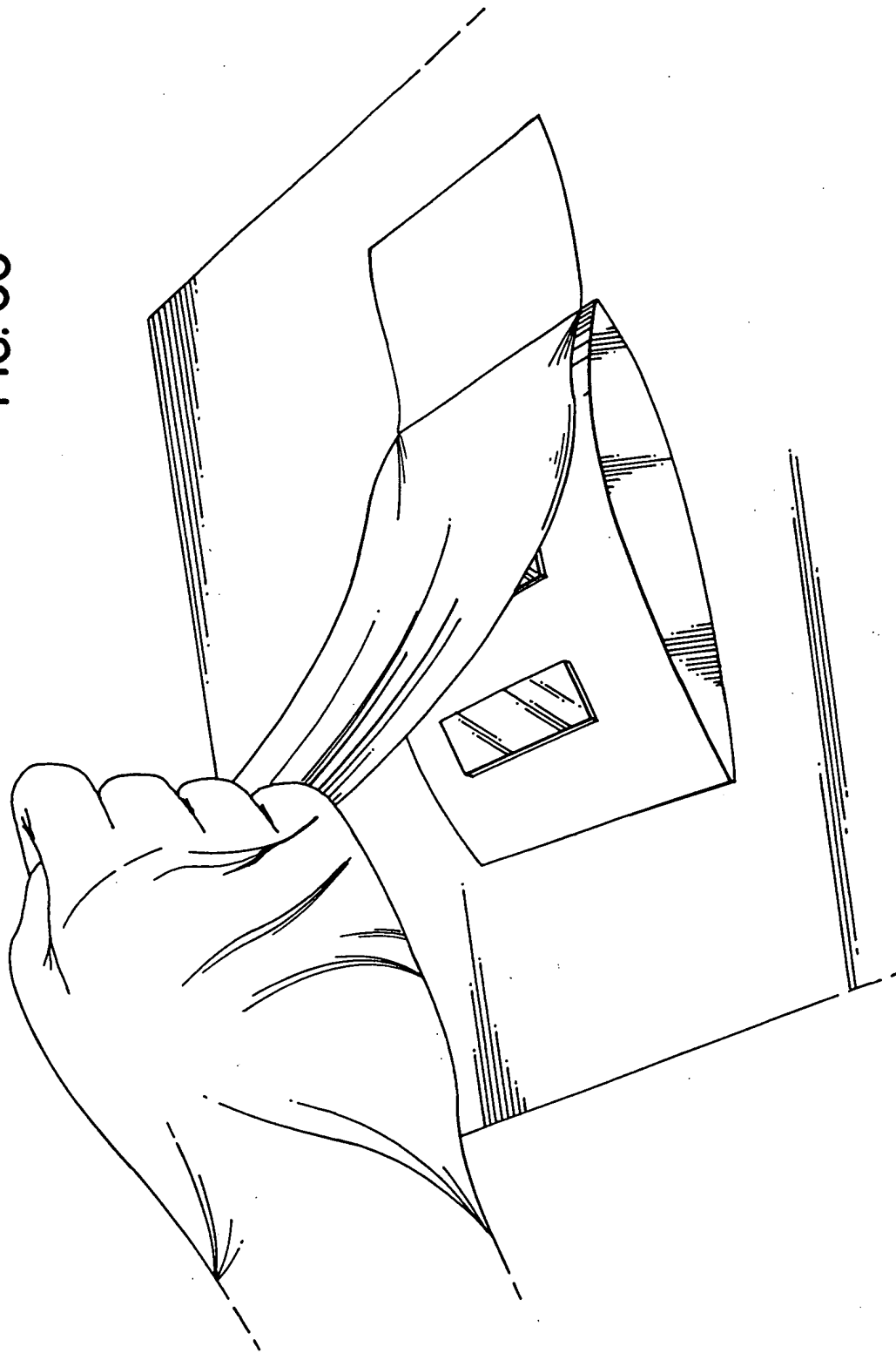
FIG. 6B



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Atty. ref.: CUNO-405

10/14

FIG. 6C

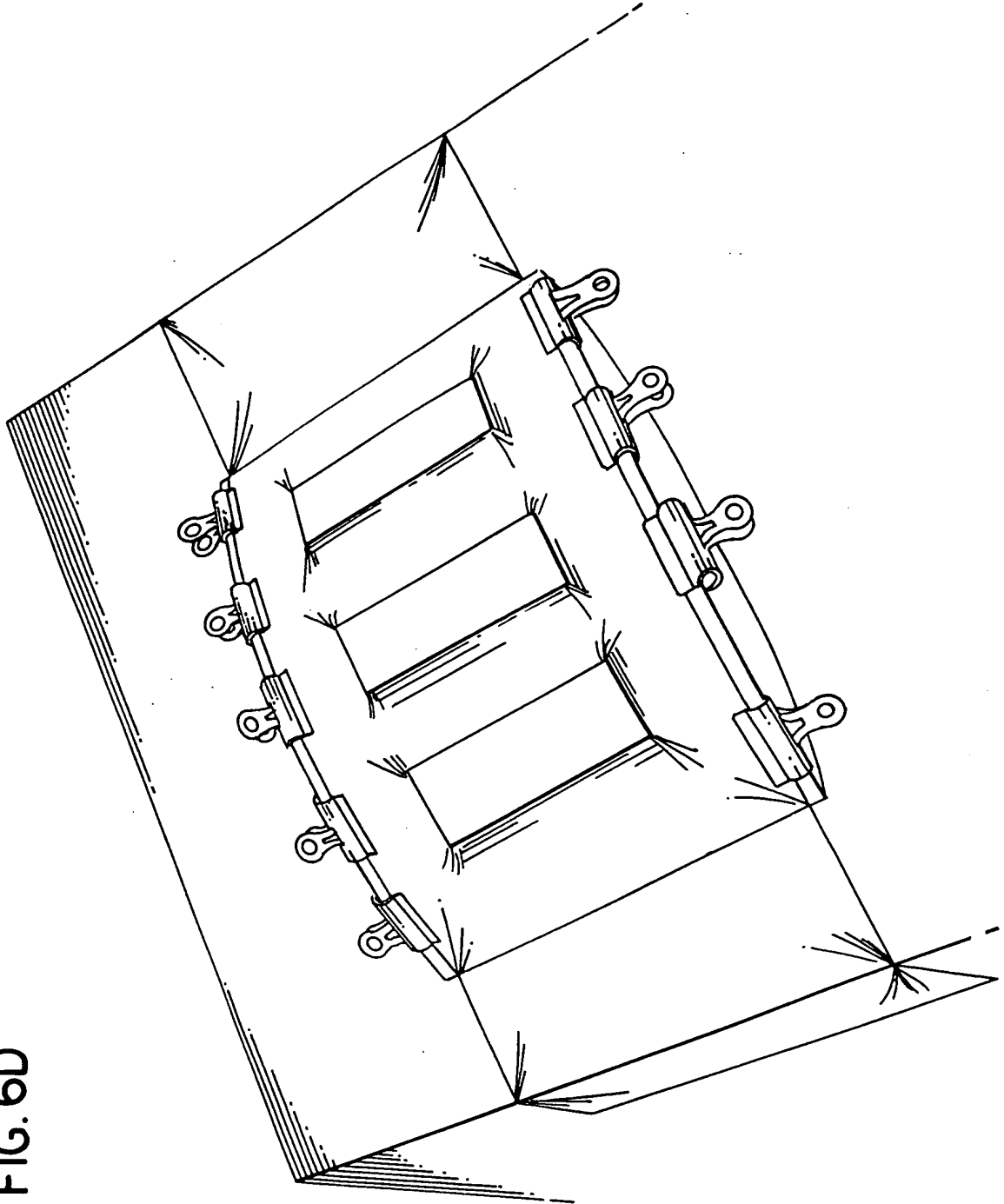




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11/14

FIG. 6D





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12/14

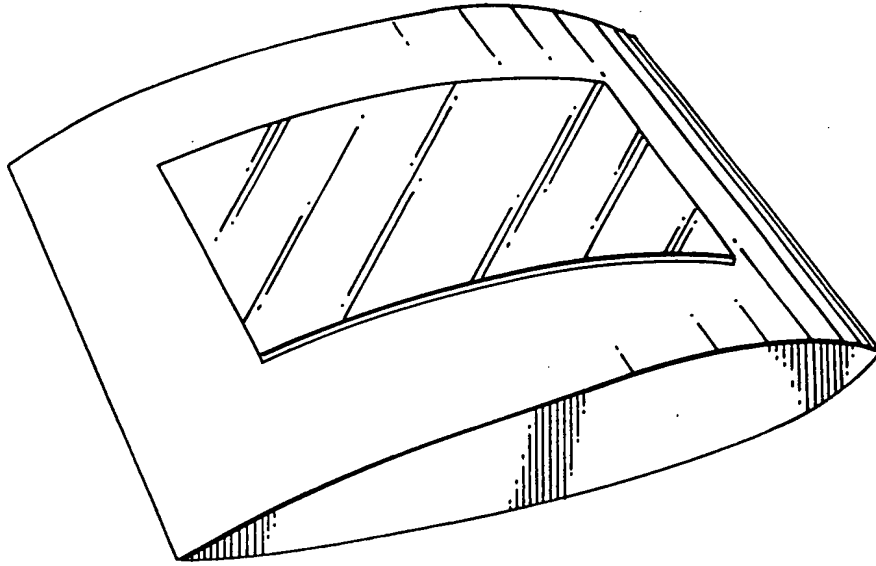


FIG. 7A

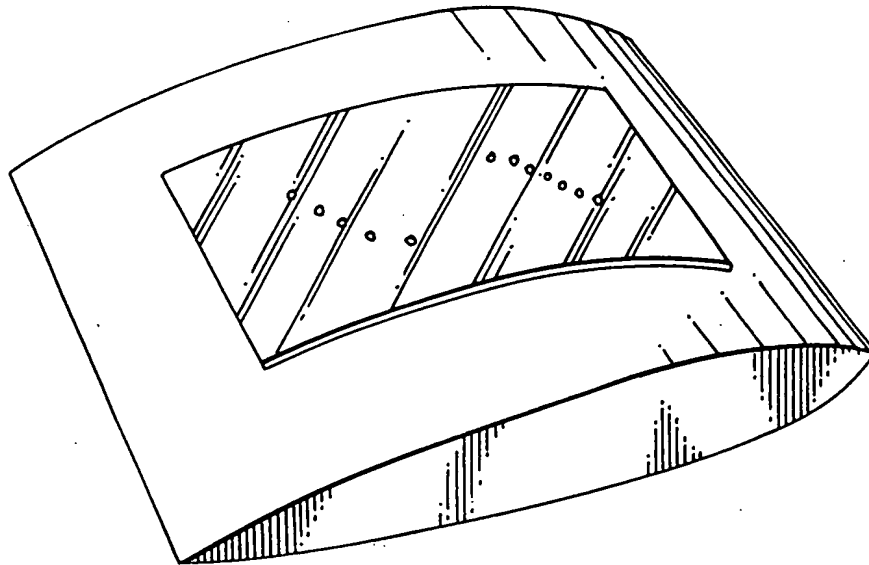
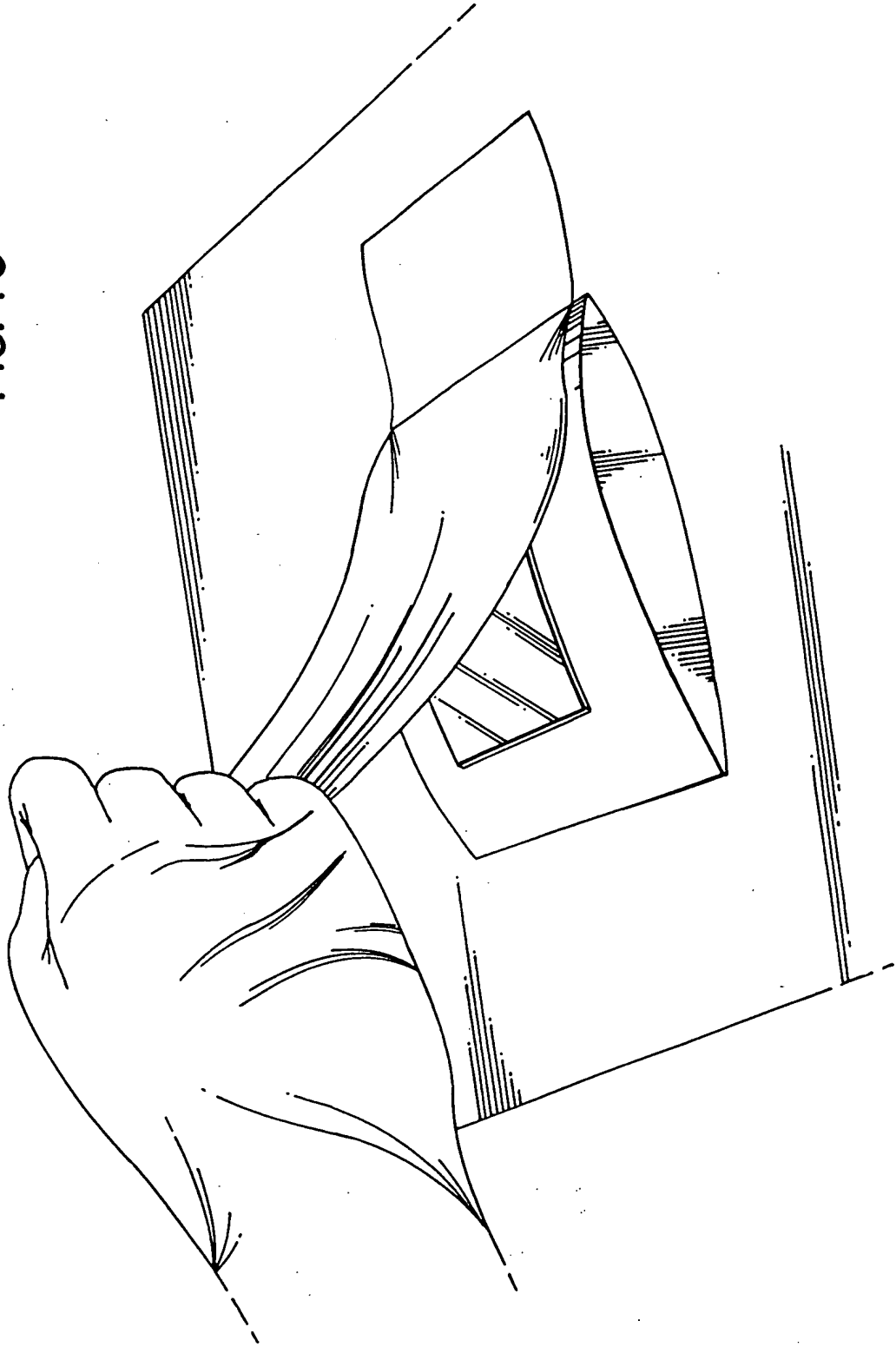


FIG. 7B



FIG. 7C





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Atty. ref.: CUNO-405

14/14

FIG. 7D

